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Permeating the Void: Establishing a New Order of Informality- Part 1

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PERMEATING THE VOID

ESTABLISHING A NEW ORDER OF INFORMALITY

MEDELLIN, COLOMBIA

LISA KOMBAKIS

PRIMARY	SAROSH ANKLESARIA
SECONDARY	JULIE LARSEN
	SUSAN HENDERSON

*The Gondola/Cable Car system creates pockets of **urban acupuncture** that allows for the informal settlements that obtained this asset to their community, to expand their possibilities of **integration** to the formal city. Whether or not the informal communities want to be involved is entirely up to them. This infrastructural addition to the informal can be placed strategically so to not only cover the widest amount of land, but also **become part of the landscape**. Local logic can be utilized to re-incorporate these new structures and **proliferate permanence** into an otherwise dynamic city.*



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“We have a lot to learn from squatter communities - about making to do with less, about efficient uses of materials and space...They might be able to facilitate the transformation of vernacular slum typologies directly into 21st century sustainable communities.”

Beadsley, A Billion Slum Dwellers

INTRO

WHAT IS TRANSIT, AND ITS RELEVANCE TO THE URBAN INFORMAL?

Transit, in an urban atmosphere, is a system used to mobilize mass amounts of population in the most efficient way possible. In terms of the urban informal, some of the transit elements used in a formal, static city are re-instated into the informal. Many times these elements (such as taxis, buses, motorcycles, cars and bicycles) are implemented in their hybridized form, creating new and localized forms of transport. Reconnecting and fostering the urban density are a few of the most important aspects that should be considered when exploring the urban informal's means of transport.

METRO CABLE

Caracis, Venezuela

Architect : Urban Think-Tank



trans-**por**-**ta**-tion

noun

tran(t)s-pər- 'tā-shən\

: the act or process of moving people or things from one place to another

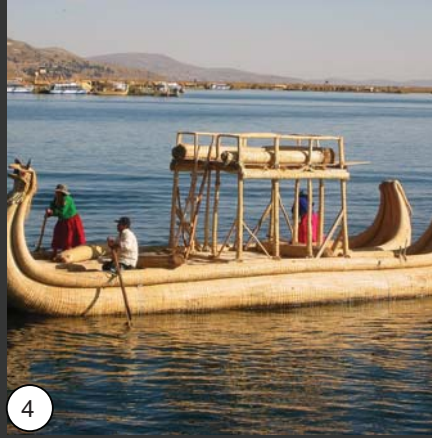
: a way of traveling from one place to another place

: a system for moving passengers or goods from one place to another

TRANSPORTATION IN LATIN AMERICA

- 1 CAR
- 2 METROPOLITANO
- 3 PLANE
- 4 BOAT
- 5 MICRO BUS
- 6 MOTOTAXI
- 7 TAXI
- 8 BICYCLE
- 9 ESCALTORS
- 10 TRAIN
- 11 COMMUTER RAIL
- 12 TRAIN
- 13 TRAMCAR
- 14 HIGH SPEED RAILWAY
- 15 WALKING





PUBLIC VS. PRIVATE TRANSIT

THE ISSUE WITH PRIVATE TRANSPORTATION IS THAT ALTHOUGH AT FIRST THERE ARE MANY POSITIVE ASPECTS THAT APPEAL TO THE SELF, IN THE LONG RUN MOST OF THE PRIVATE TRANSPORTATION METHODS LEAD TO BIGGER CONCERNS FOR THE COMMUNITY AND AT A LARGER SCALE PICTURE.





VOCABULARY

barrio - An urban district, quarter, or community in a predominately spanish speaking country. The exact english translation is 'neighborhood'.

favela - A term used only in Brazil to label a shanty town, commonly found in urban settlements.

gondola - A cabin or enclosed compartment on a suspended lift.

slum - An overcrowded urban area, usually populated by very poor people and have less than average, unhealthy housing conditions.

microbus - A passenger carrying motor vehicle that is larger than a minivan but smaller than the average bus. Usually a public transportation option.

communa - A relatively small community that has come formed based on common interest, work, and income.

<http://www.thefreedictionary.com/>

colectivo - Similar to a taxi, but a colectivo normally waits til it has reached full capacity to head towards its destination.

sprawl - To spread or develop irregularly or without restraint.

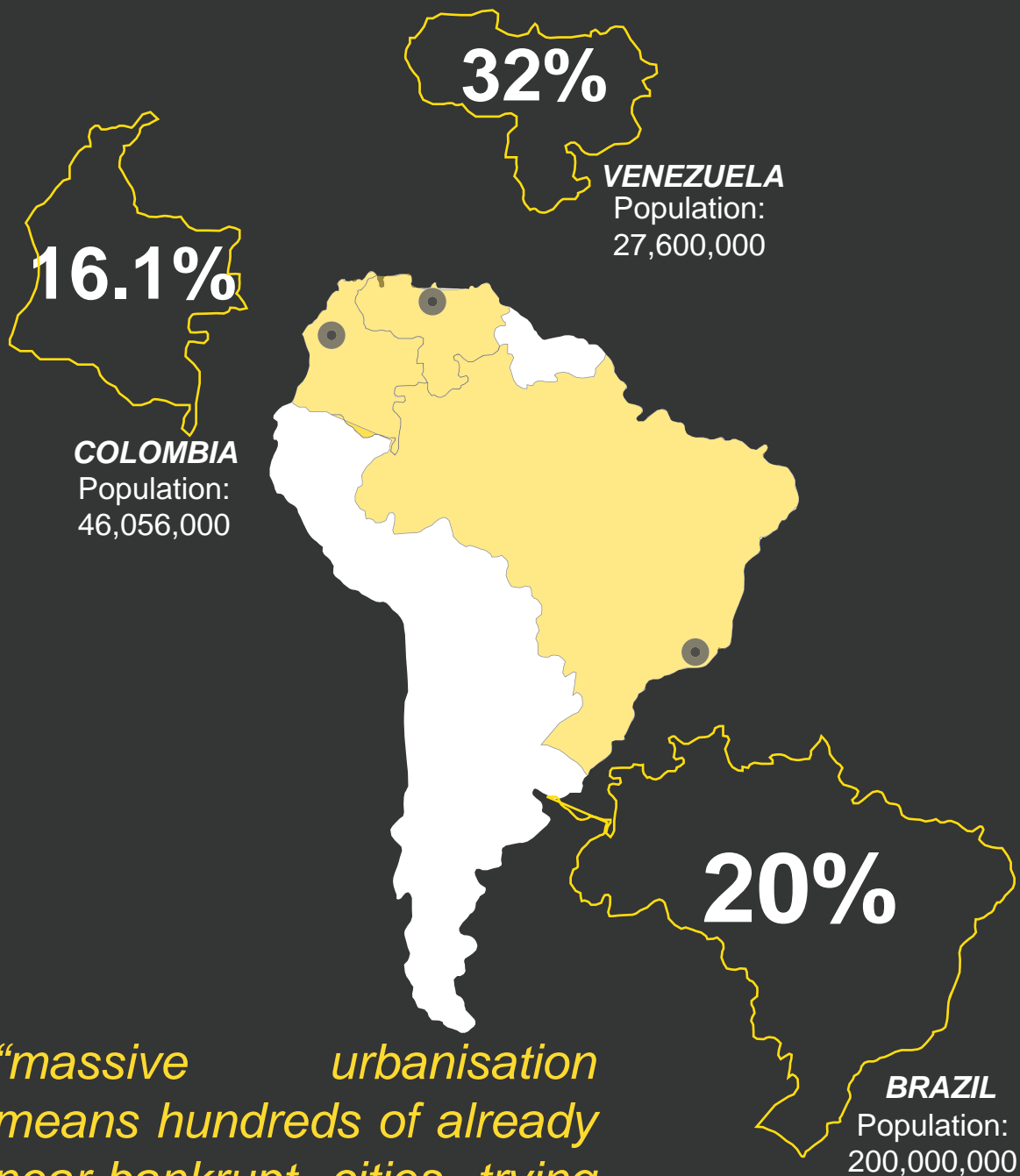
development - The act or process of growing or causing something to grow or become larger or more advanced.

opportunity - A favorable juncture of circumstances.

informal - Marked by the absence of formality, in this case, formal infrastructure

formal - Relating to or involving the outward form, structure, relationships, or arrangement of elements rather than content.

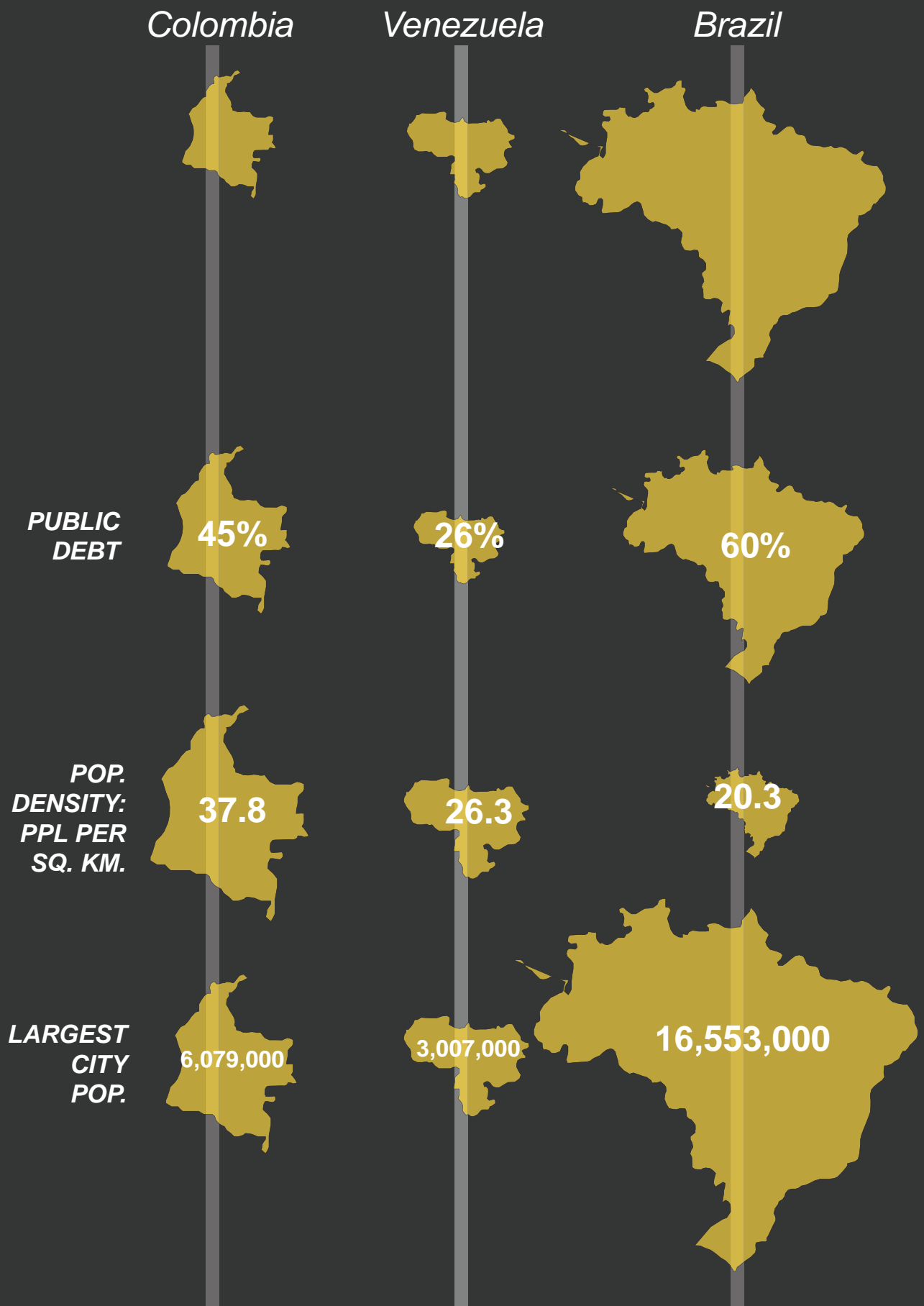
PERCENTAGE OF POPULATION LIVING IN SLUM CONDITIONS



“massive urbanisation means hundreds of already near-bankrupt cities trying to cope in 20 years with the kind of problems London or New York only managed to address with difficulty in 150 years.” John Vidal (2004) from Chapter 1 of “Tomorrow’s Crises Today” by Chris Horwood

<http://www.prb.org/DataFinder/Topic/Rankings.aspx?ind=13>
<http://www.indexmundi.com/colombia/slum-population.html>

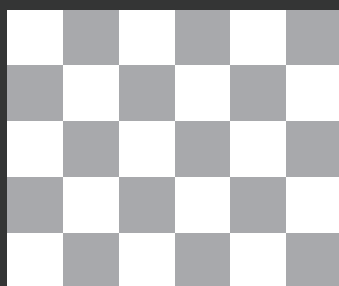
GENERAL POPULATION



RIO DE JANEIRO'S FAVELAS



95%
of the
houses
were
brick and
concrete



75%
had
tile
floors

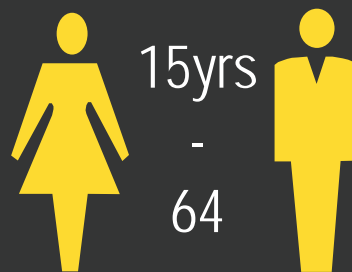


44%
had
computers

From a Survey by the IETS, interesting results came up when speaking to and comparing results from 6 of the major favelas in rio de Janeiro. They interviewed 92,000 people across the 6 favelas (total population of all favelas in Rio de Janeiro is 1,400,000).



76%
have lived in
the community
for 10+ yrs



90%
of working
age resi-
dents were
employed

:
26%
employed
in own
business

CASE STUDIES

In terms of the Infrastructure of Transit, we have chosen to look into a few examples of successful systems in South America. Bus transit systems, Gondolas, Metro systems are a few that we have noticed are exemplary and allow for the circulation of, not only within the barrios, but also throughout the respective cities. Caracas, Rio de Janeiro, Medellin, and Lima have implemented (or are in the process of implementing) these systems and have seen positive results and have inspired other towns/ cities/ countries to do the same. A few of these results have a lot to do with the involvement of the barrios to do better for themselves. Transit Infrastructure mainly disengages the population of the favelas with the proper city, considering the favelas' public transport is a different system than the rest of the city.

METRO CABLE

Caracas, Venezuela

Architect : Urban Think-Tank





in-for-mal
adjective

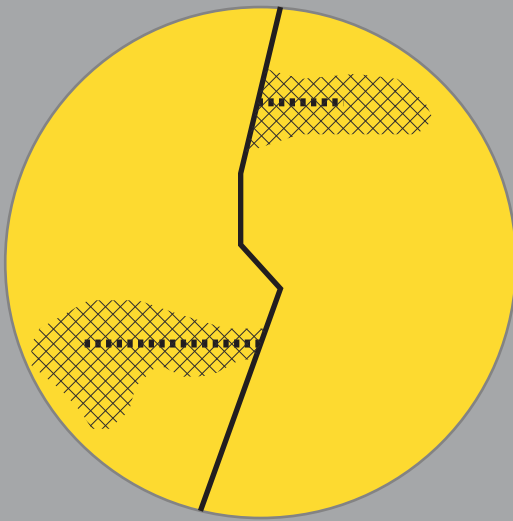
/in'fôrməl/

: not according to the pre-
scribed, official, or customary
way or manner; irregular; unof-
ficial

: not officially recognized
or controlled

: appropriate to everyday
life or us

MEDELLIN



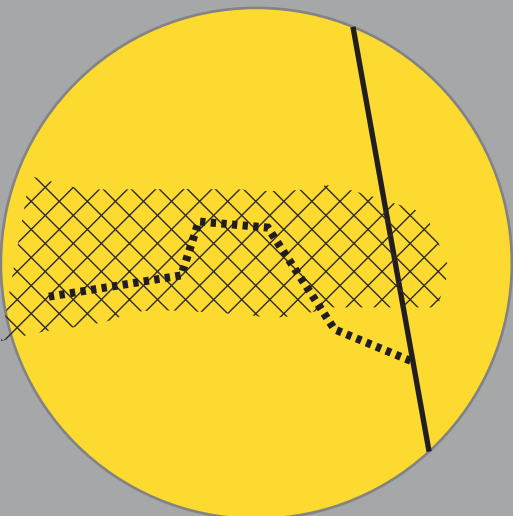
Columbia's second largest city, Medellin, once known as the murder capital of the world, is now a hub for new infrastructural opportunity. Architects are treating these favelas as testing grounds for transit slum intervention in an attempt to regenerate a new culture of urbanism. These newly designed spaces popping up all around Colombia are all part of a collective mindset that is guiding a newly found unity between the informal and formal society.

CARACAS



Caracas is the capital and largest city in Venezuela. It is a very mountainous area located in the northern region of the country. The dichotomy of this area is the epitome of social difference. One part is the strategically planned, infrastructural, sturdy formal side, and the contrary is the spontaneous, uncontrollable informal. The challenge now is how does one connect them. How can we intertwine these polar extremes to inturn create

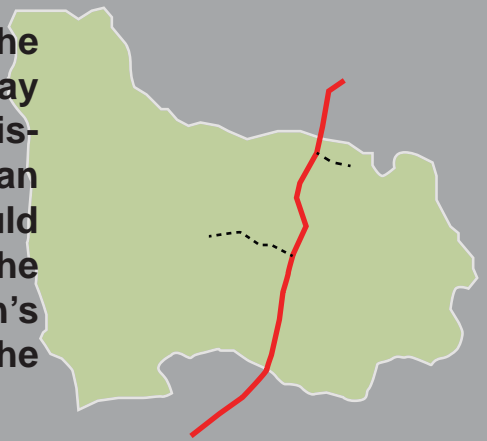
RIO DE JANEIRO



Rio de Janeiro is the capital city of the State Rio de Janeiro. It is the second largest city in Brazil. The six stations that make up the Teleferico do Alemao, connect the informal areas with the public railway system. The gondolas provide easier access to the favela community while creating secure hubs within the favela. In this case, the Alemao complex saw major decrease in violence once the gondola stations had their sites. The Alemao complex

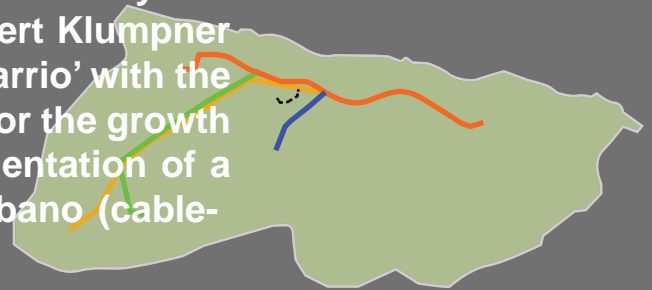
COLOMBIA

The city's mayor, Aníbal Gaviria, also foresees in the near future the elimination of the chaotic highway system, located in the center of downtown that disrupts the unity of the city; with this would come an electric tram along the periphery of the city that would in turn guide the sprawl of the slums and redensify the city center. All these dreams for the future of Medellín's new urbanism are primarily guided by and for the people.



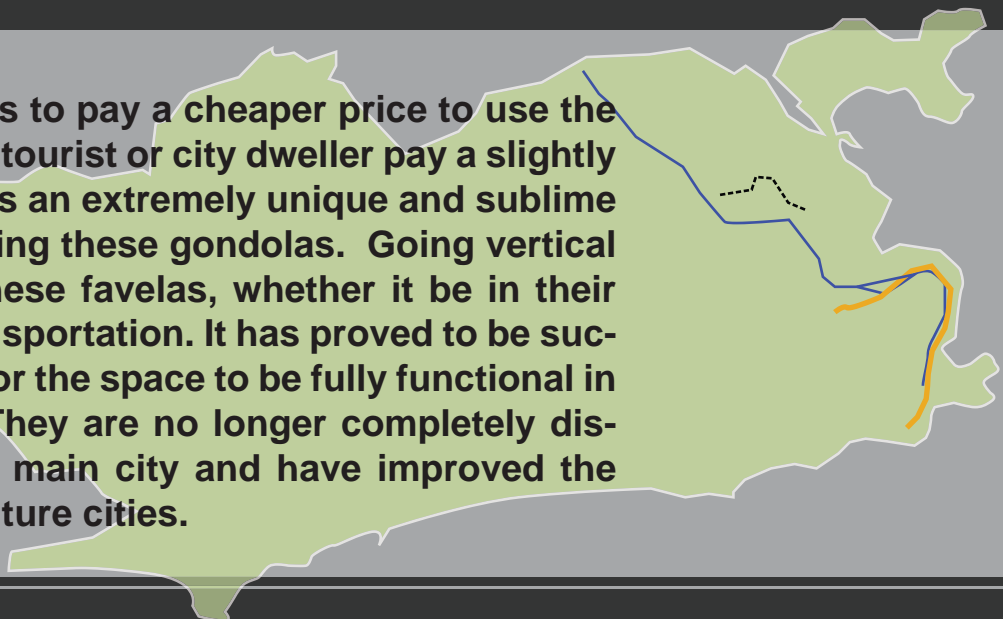
VENEZUELA

benefits for all. The main purpose as stated by the architects (Alfredo Brillembourg and Hubert Klumpner of Urban Think Thank) is to connect the 'barrio' with the transit system of the formal city, allowing for the growth of social dimensions, through the implementation of a Teleferico para Transporte Masivo Interurbano (cable-car for inner urban mass transportation).

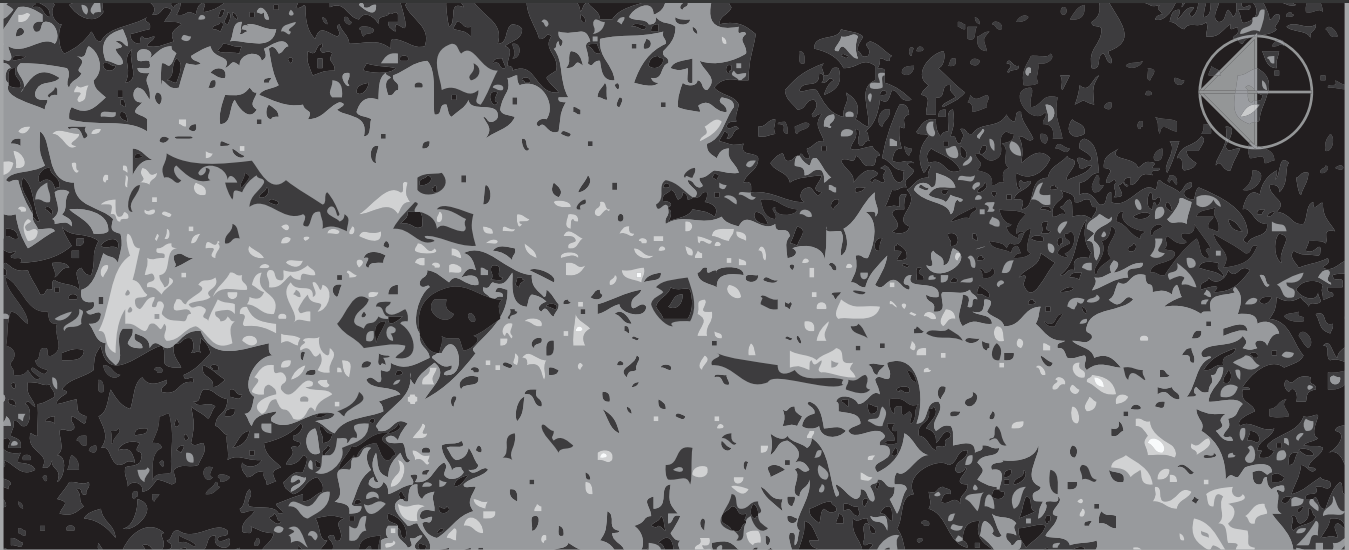


BRAZIL

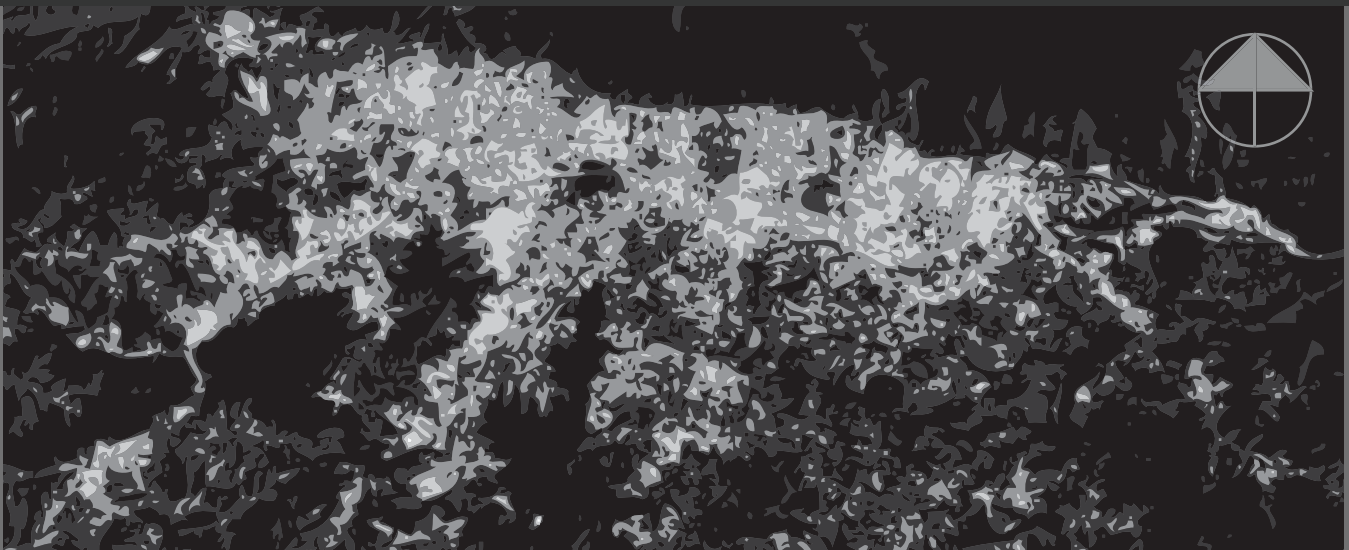
also allows for locals to pay a cheaper price to use the gondolas, while any tourist or city dweller pay a slightly higher price. There is an extremely unique and sublime experience while using these gondolas. Going vertical is the solution to these favelas, whether it be in their own domicile or transportation. It has proved to be successful and allows for the space to be fully functional in all its capabilities. They are no longer completely disconnected from the main city and have improved the urban planning of future cities.



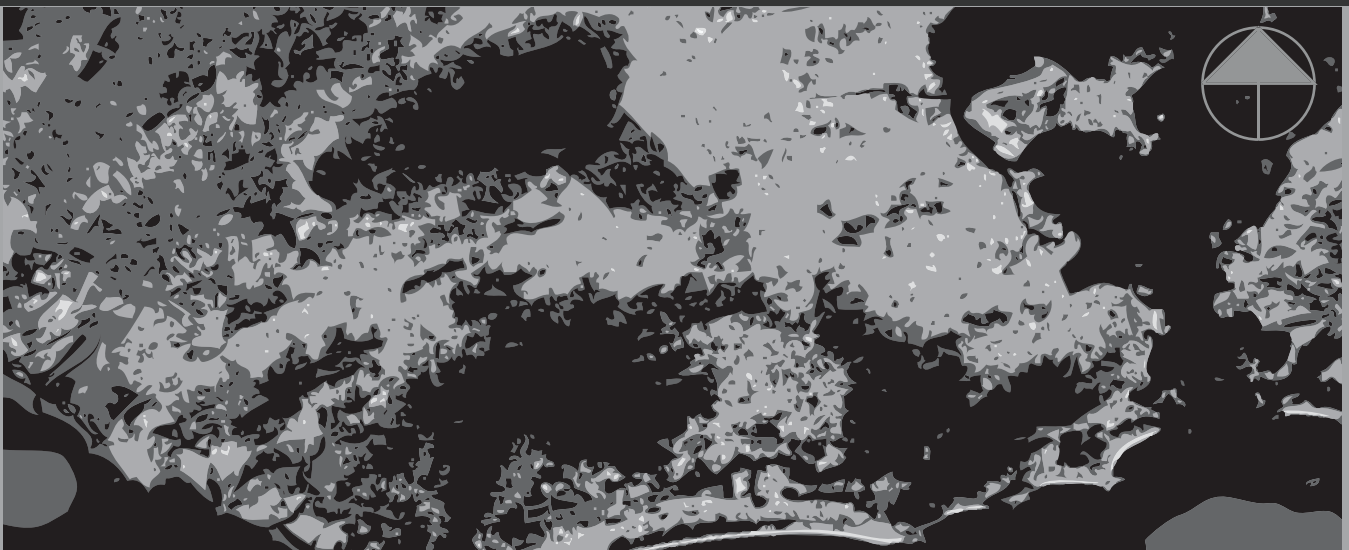
MEDELLIN



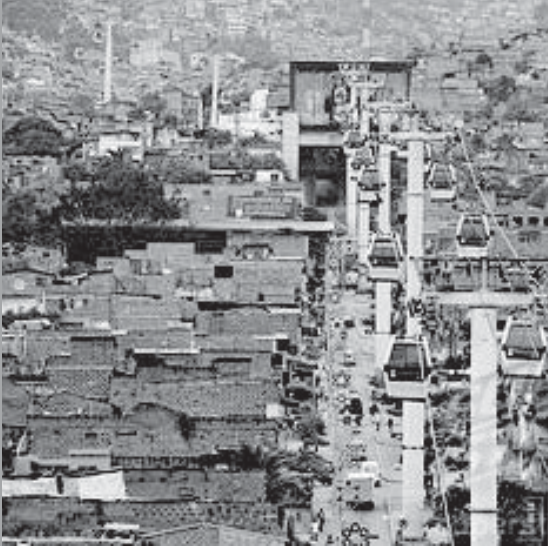
CARACAS



RIO DE JANEIRO



COLOMBIA



POPULATION 2.4 MILLION

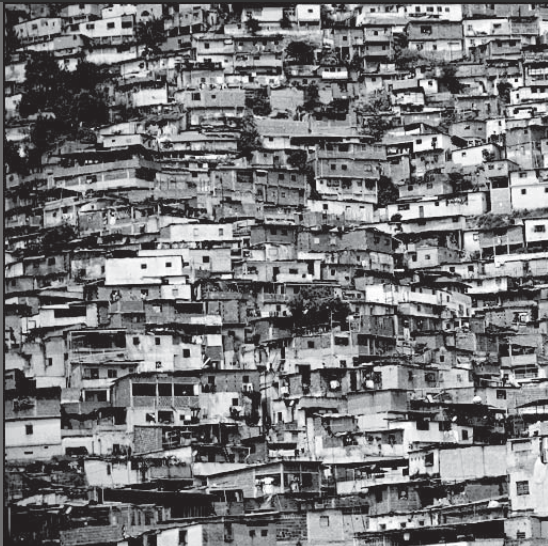
DENSITY 17,940 / SQ. MILE

AREA 147 SQ. MILES

DISTRICTS 16

ELEVATION 4,905 FT

VENEZUELA



POPULATION 3.4 MILLION

DENSITY 11,627 / SQ. MILE

AREA 167.2 SQ. MILES

DISTRICTS 5

ELEVATION 3,000 FT

BRAZIL



POPULATION 6.09 MILLION

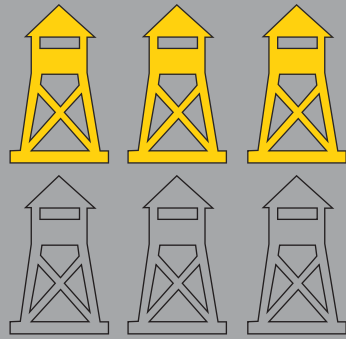
DENSITY 12,380 / SQ. MILE

AREA 1,759.6 SQ. MILES

DISTRICTS 4

ELEVATION 0 to 3,349 FT

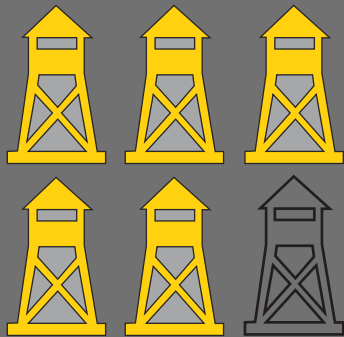
METRO CABLE
MEDELLIN



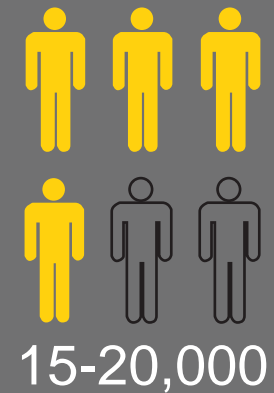
5.7
miles



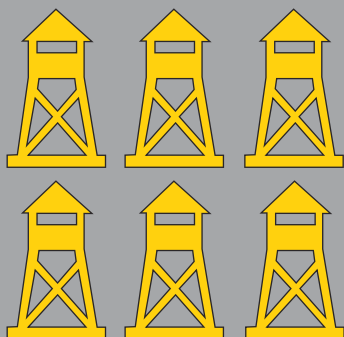
CABLE CAR
CARACAS



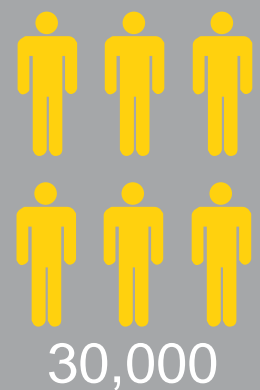
1.3
miles



TELEFERICO
RIO DE JANEIRO




2.7
miles



NUMBER OF
STATIONS

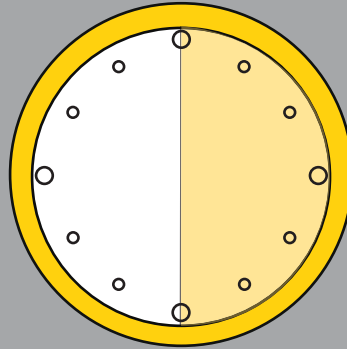
DISTANCE
COVERED

 CAPACITY DAILY
= 5,000

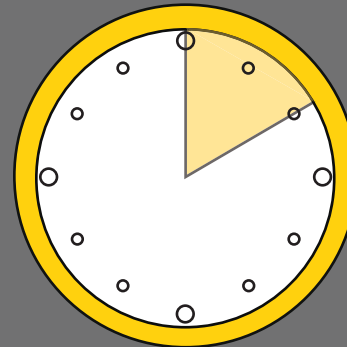
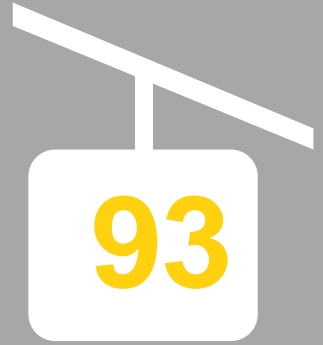
CAPACITY OF
EACH CABIN

TOTAL TIME
ALL TOGETHER

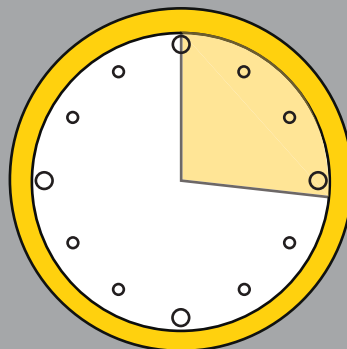
NUMBER OF
CABINS



30 min



10 min



16 min



MEDELLIN

SPACIAL STATUS

MEDELLIN'S METROPOLITAN AREA RANKS IN THE TOP 10 MOST DENSELY POPULATED AREAS IN THE WORLD. IT'S CITY IS SPLIT DOWN THE CENTER WITH A RIVER, AND SPRAWLS OUT EAST AND WEST UNTIL IT HITS THE MOUNTAINOUS REGIONS. MOST OF THE INFORMAL AREAS LAY ON THE PERIPHERY OF THE REGION, AT THE BEDS OF MOUNTAINS AND HILLS, FURTHEST FROM THE CORE TRANSPORTATION.



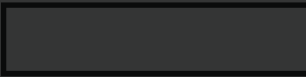
CITY BOUNDARIES



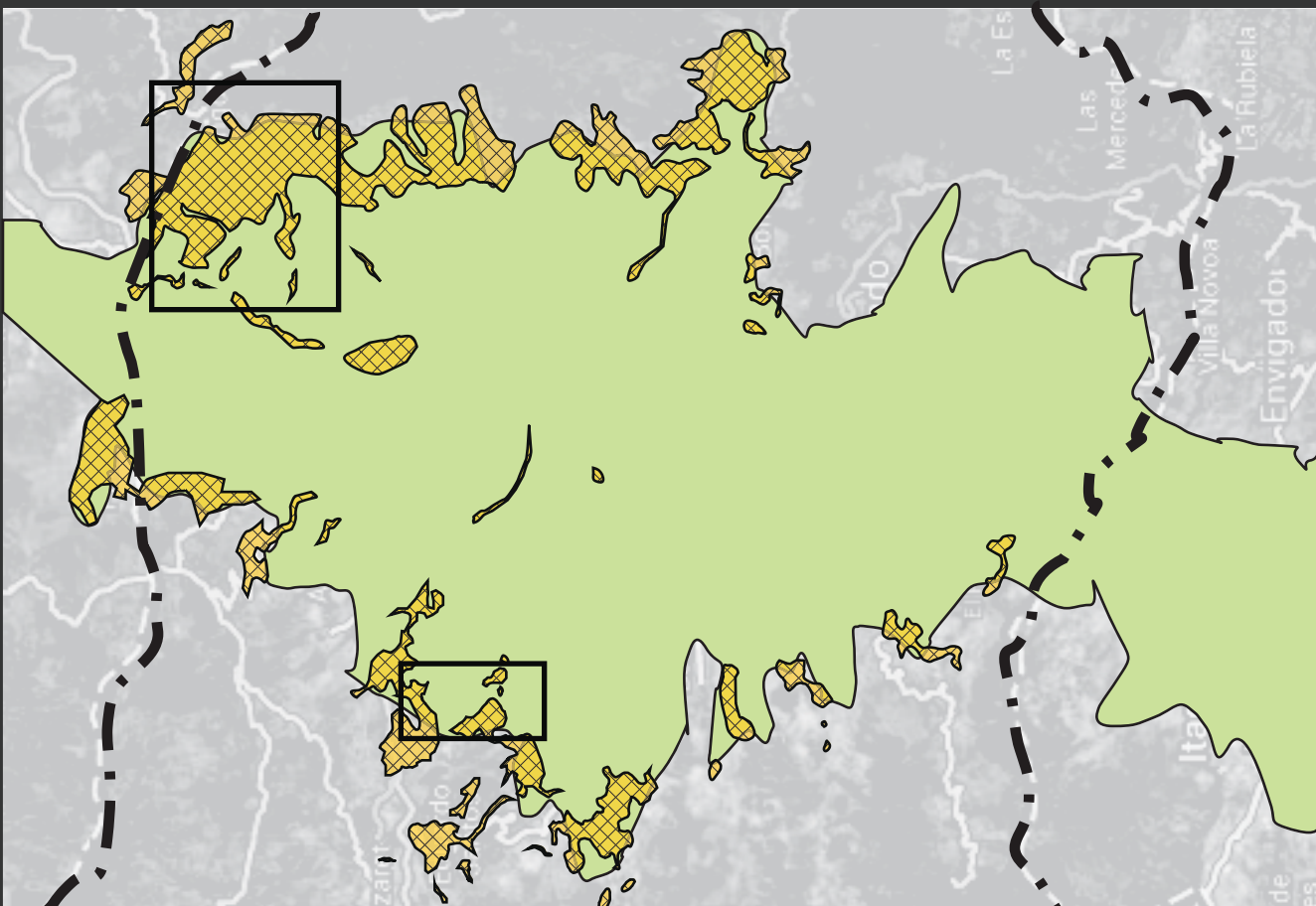
URBANIZED AREAS



INFORMAL SETTLEMENTS



GONDOLA SITE



98

CENTS

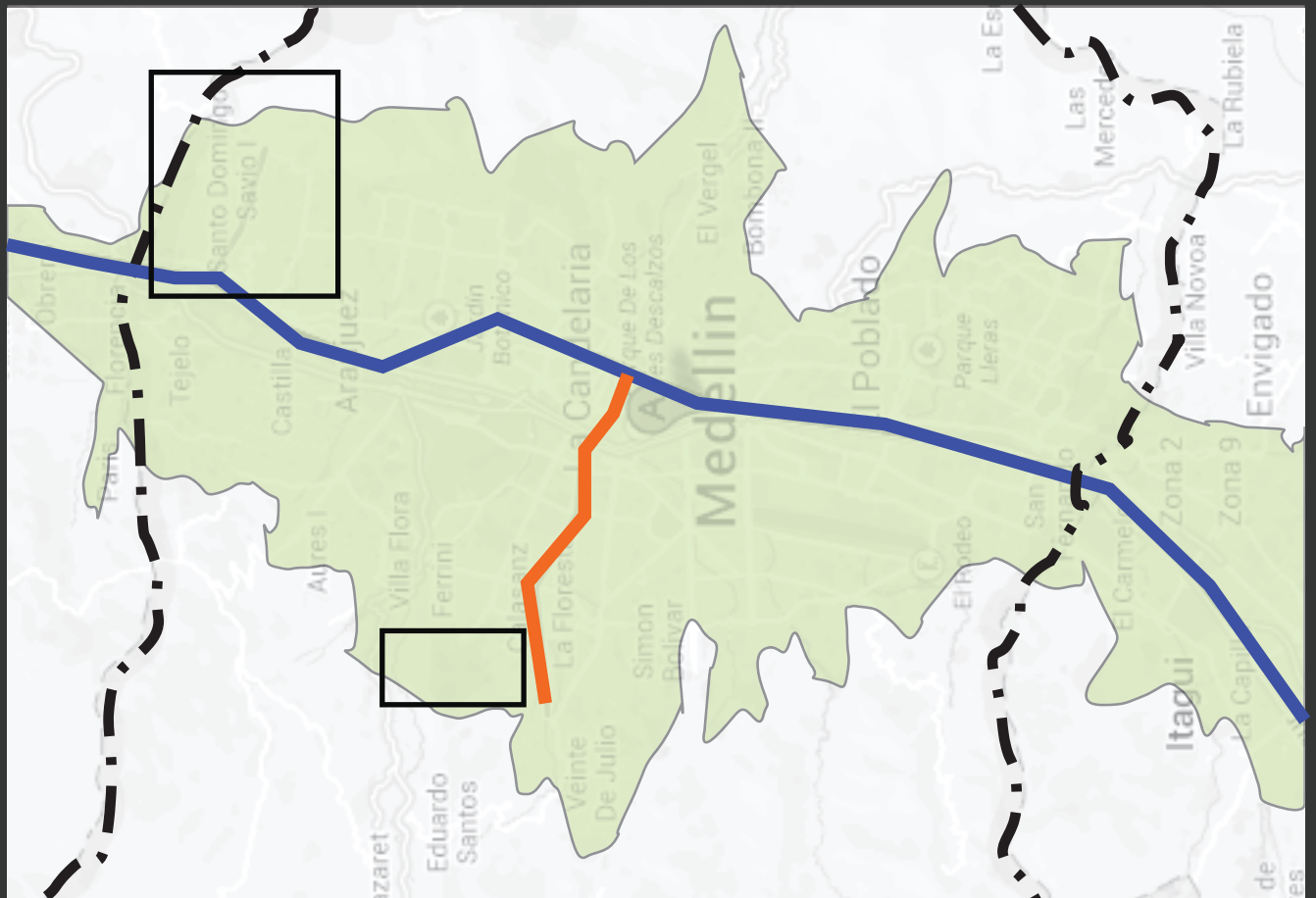
METRO SYSTEM

THIS PUBLIC TRANSIT RUNS NORTH AND SOUTH THROUGH THE METROPOLITAN AREA OF MEDELLIN AND FROM THE CENTER OUT WEST. THIS IS THE ONLY METRO SYSTEM IN ALL OF COLOMBIA

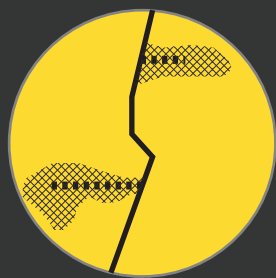


METRO A - 21 STATIONS

METRO B - 6 STATIONS



MEDELLIN



50
cents

LINE J
SAN JAVIER
JUAN XXIII
VALLEJUELOS
LA AURORA

LINE K
ACEVEDO
ANDALUCIA
POPLAR
SAN DOMINGO

LINE K
SAN DOMINGO
ARVI



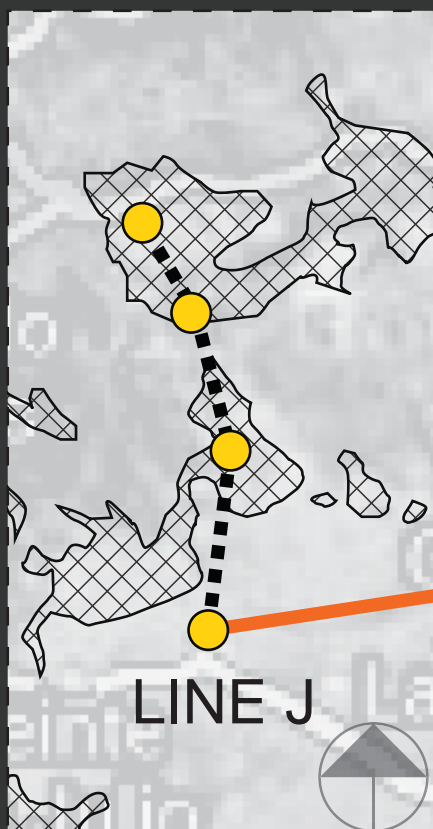
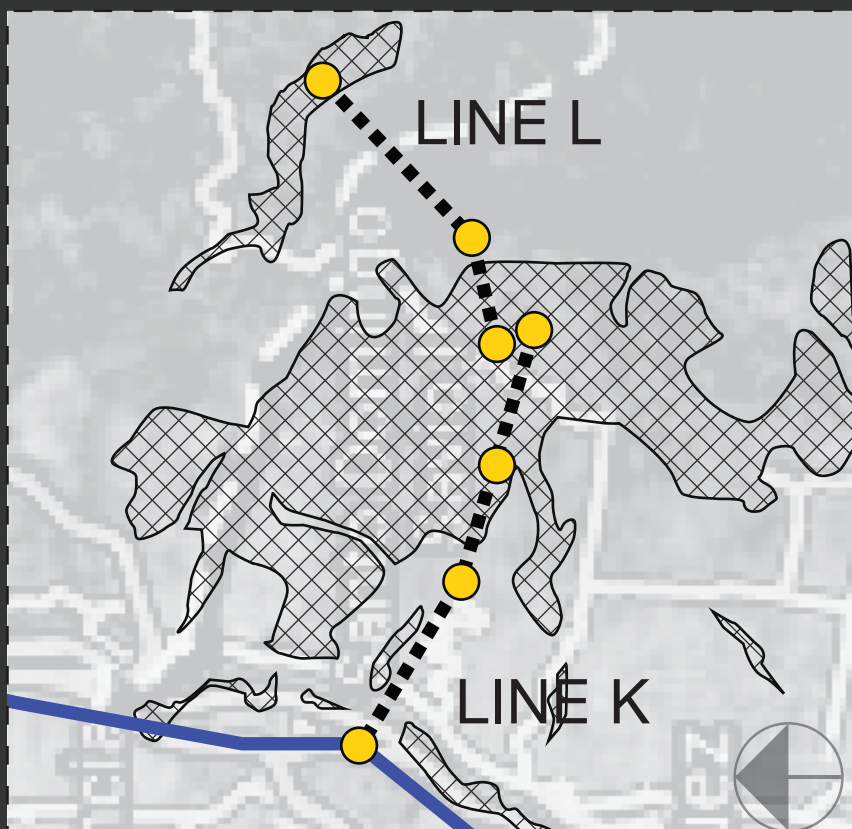
CITY METRO LINE

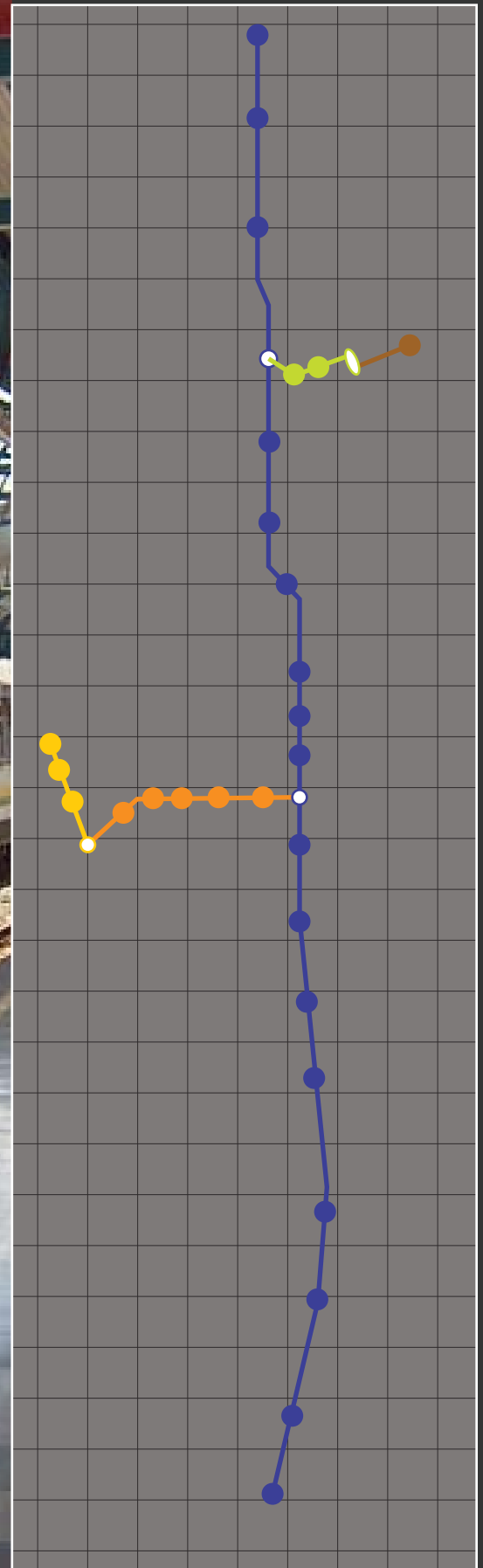


INFORMAL URBAN



GONDOLA LINE

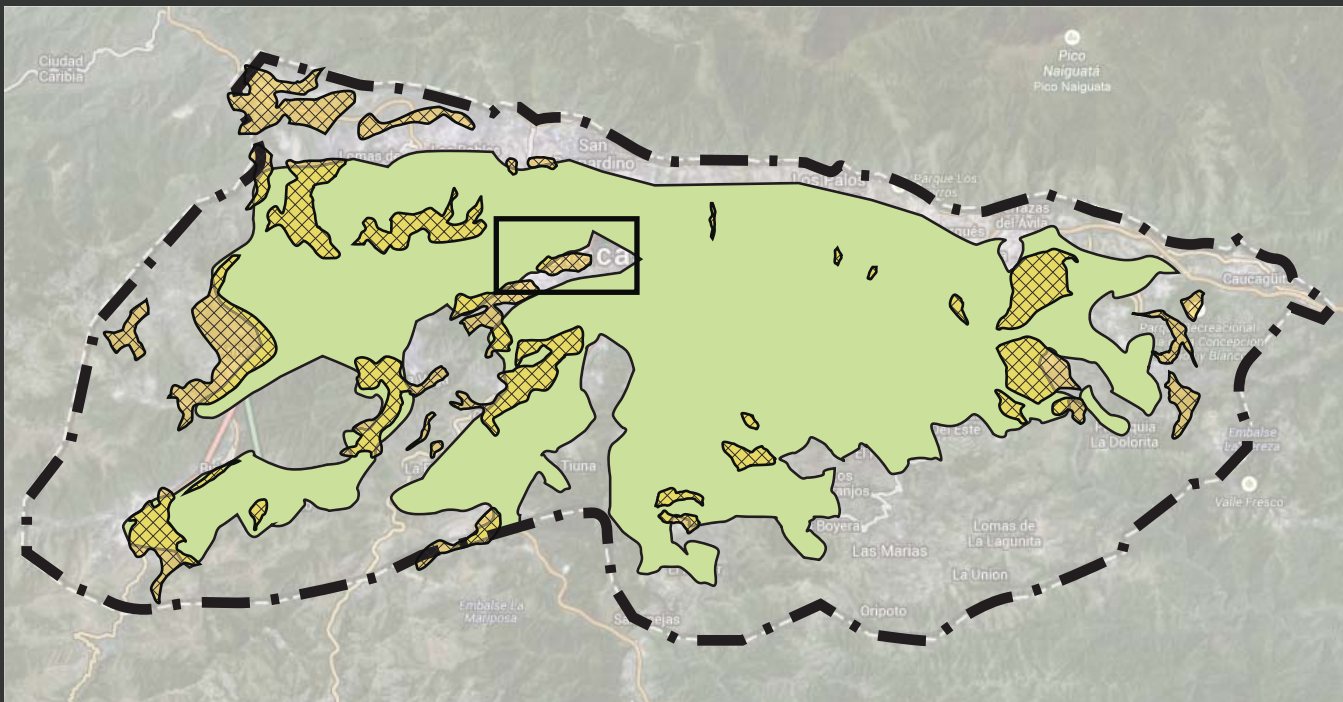
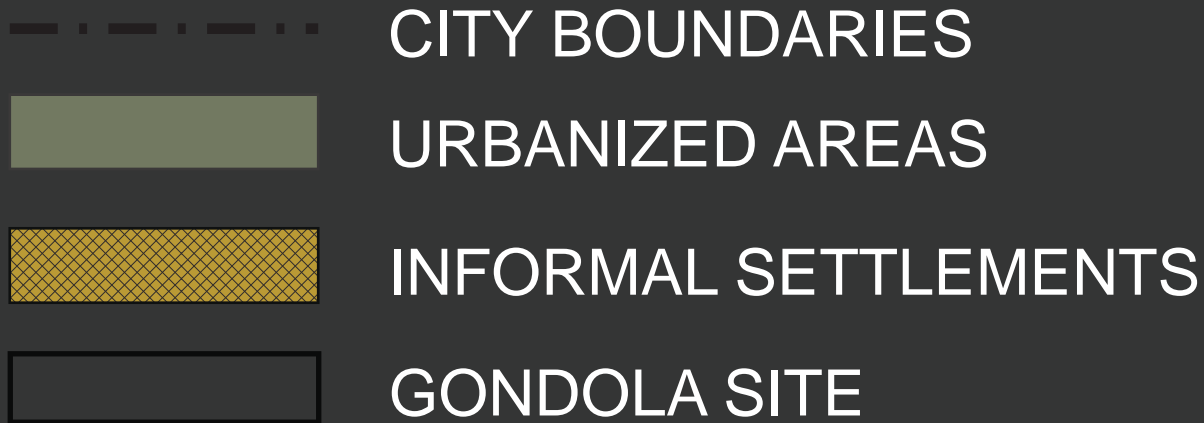




CARACAS

SPACIAL STATUS

CARACAS IS THE CAPITAL AND LARGEST CITY IN VENEZUELA. THIS METROPOLITAN AREA LIES IN THE VALLEY OF THE MOUNTAINOUS NORTHERN REGION OF THE COUNTRY, HAVING LIMITED FLAT TERRAIN FOR BUILDING SITUATIONS. MOST OF THE INFORMAL SETTLEMENTS IN CARACAS ARE LOCATED NEAR THE BEDS OF HILLS OR MOUNTAINS, AND SIMILAR TO OTHER SOUTH AMERICAN COUNTRIES, ARE FURTHEST FROM MOST TRANSIT AREAS.



METRO SYSTEM

25
cents

THE MOTTO OF THIS METRO IS "WE ARE PART OF YOUR LIFE" (SOMOS PARTE DE TU VIDA), AND THEY SURE ARE A HUGE MEANS OF TRANSIT AROUND CARACAS. ALL TOGETHER THE CARACAS METRO SYSTEM HAS 48 STATIONS AND RUNS 31.6 MILES LONG.

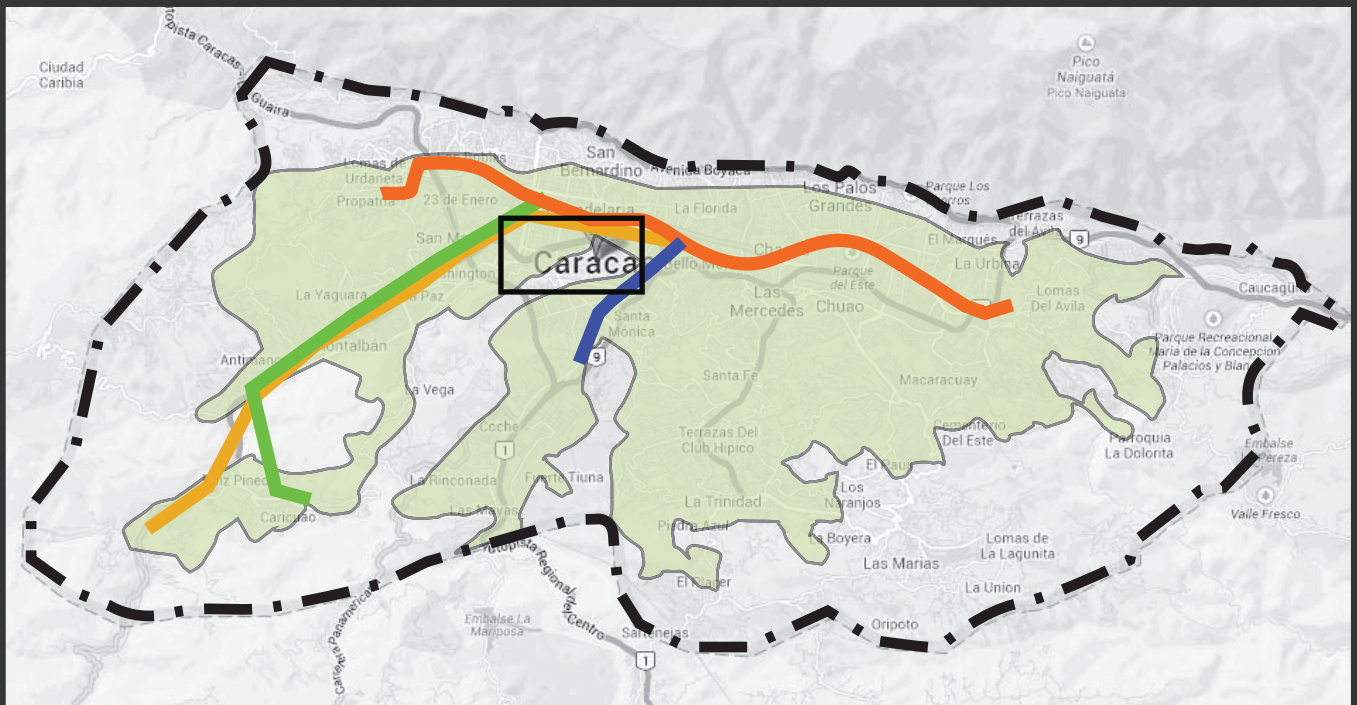


— METRO 1 - 22 STATIONS

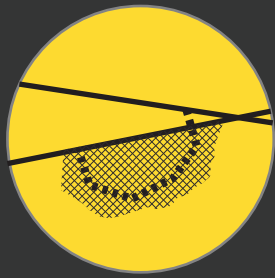
— METRO 3 - 14 STATIONS

— METRO 2 - 11 STATIONS

— METRO 4 - 11 STATIONS



SAN.AUGUSTIN



09
cents

5 STOPS

SAN AUGUSTIN

EL MANGUITO

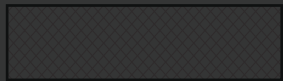
LA CEIBA

HORNOS DE CAL

PARQUE CENTRAL



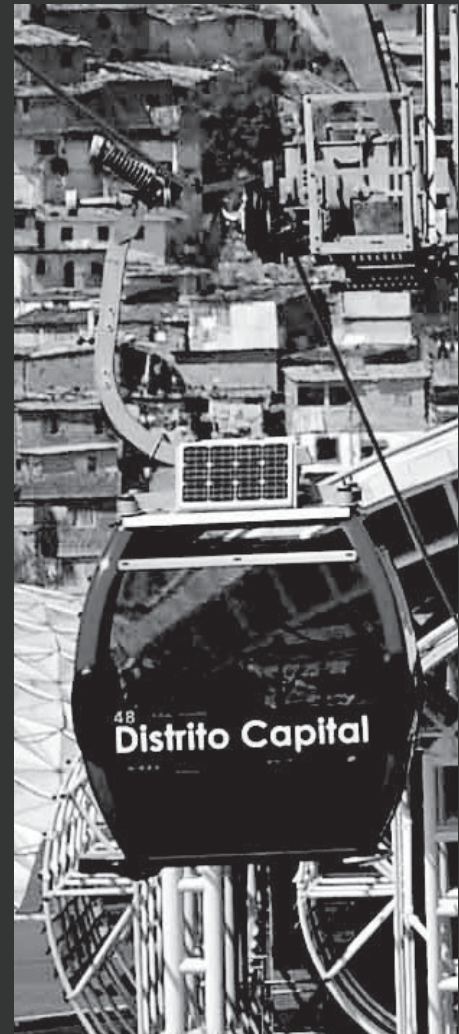
CITY METRO LINE

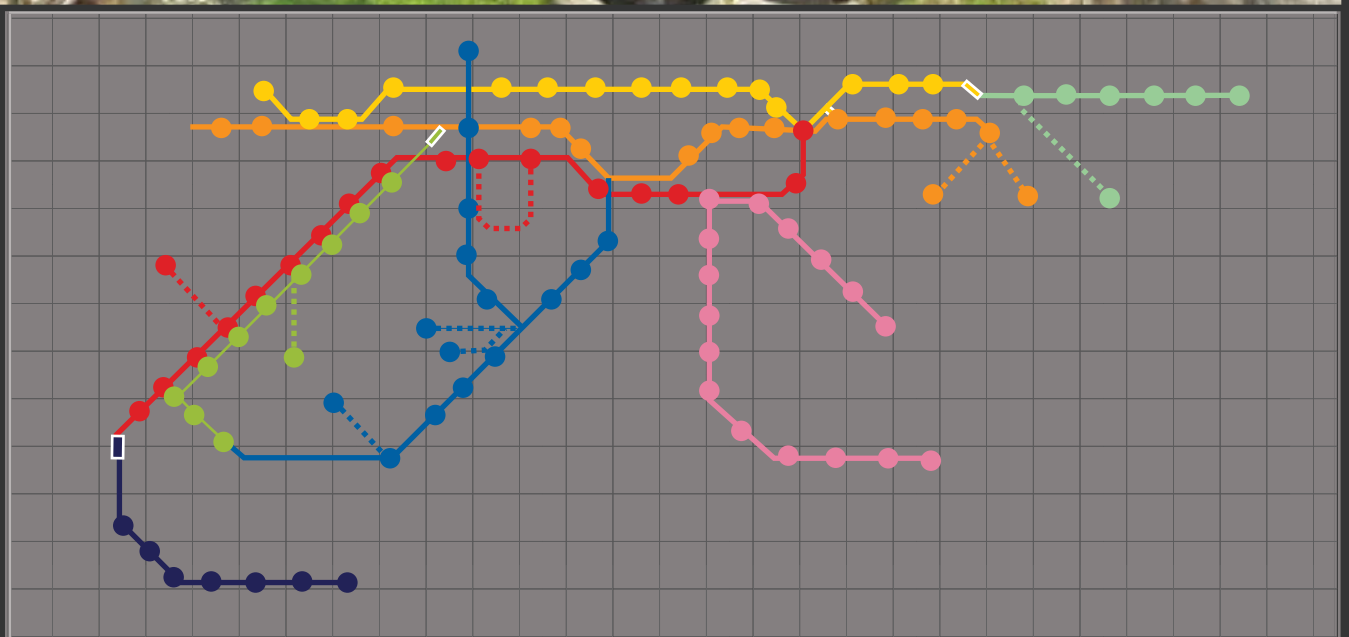


INFORMAL URBAN



GONDOLA LINE





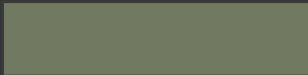
RIO DE JANEIRO

SPACIAL STATUS

CURRENTLY STANDING AS THE SECOND LARGEST CITY IN BRAZIL, AND THE THIRD LARGEST METROPOLITAN AREA IN SOUTH AMERICA, RIO (AS MOST NAME IT), IS KNOWN FOR IT'S IMMENSE ATTENTION TO CULTURE, NATURAL LANDSCAPE, AND BEAUTIFUL BEACHES.



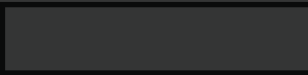
CITY BOUNDARIES



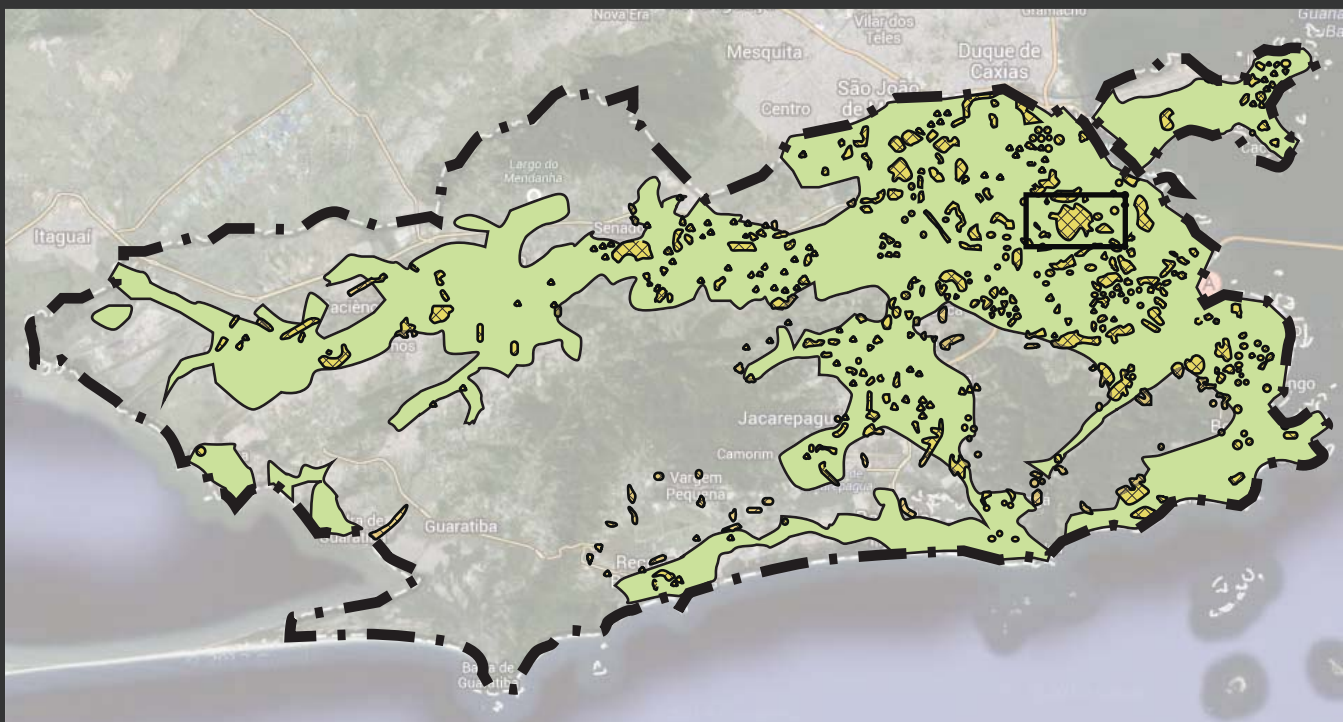
URBANIZED AREAS



INFORMAL SETTLEMENTS



GONDOLA SITE



METRO SYSTEM

1.47
dollars

ALTHOUGH THE RIO DE JANEIRO UNDERGROUND RAILWAYSTATION ONLY HAS 2 LINES, IT HAS A WHOPPING 35 STATIONS THAT ARE PRIMARILY LOCATED ON THE EASTERN, URBANIZED REGIONS OF THE CITY.

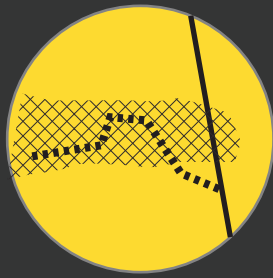


METRO A - 20 STATIONS

METRO B - 15 STATIONS



COMPLEXO DO ALEMAO



46
cents

6 STOPS

BON SUCCESSO

ADEUS

BAIANA

ALEMAO

ITARARE

PALMEIRAS

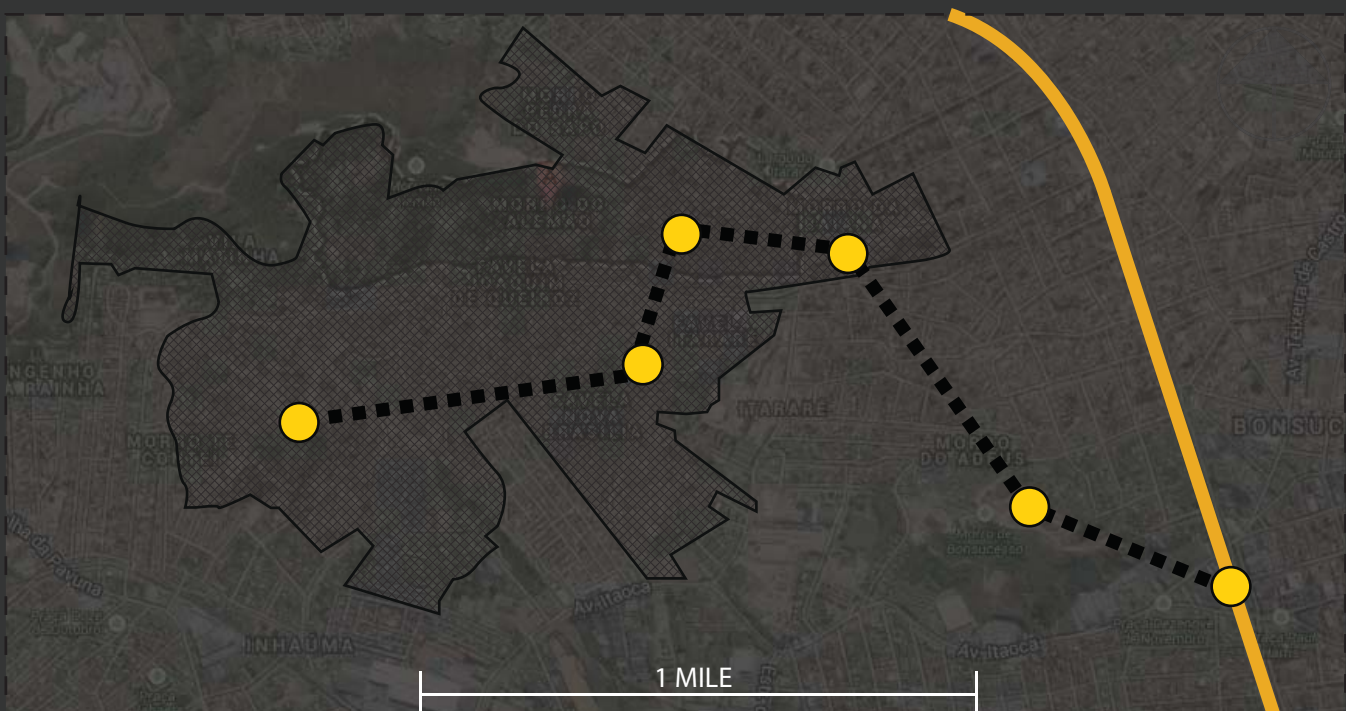


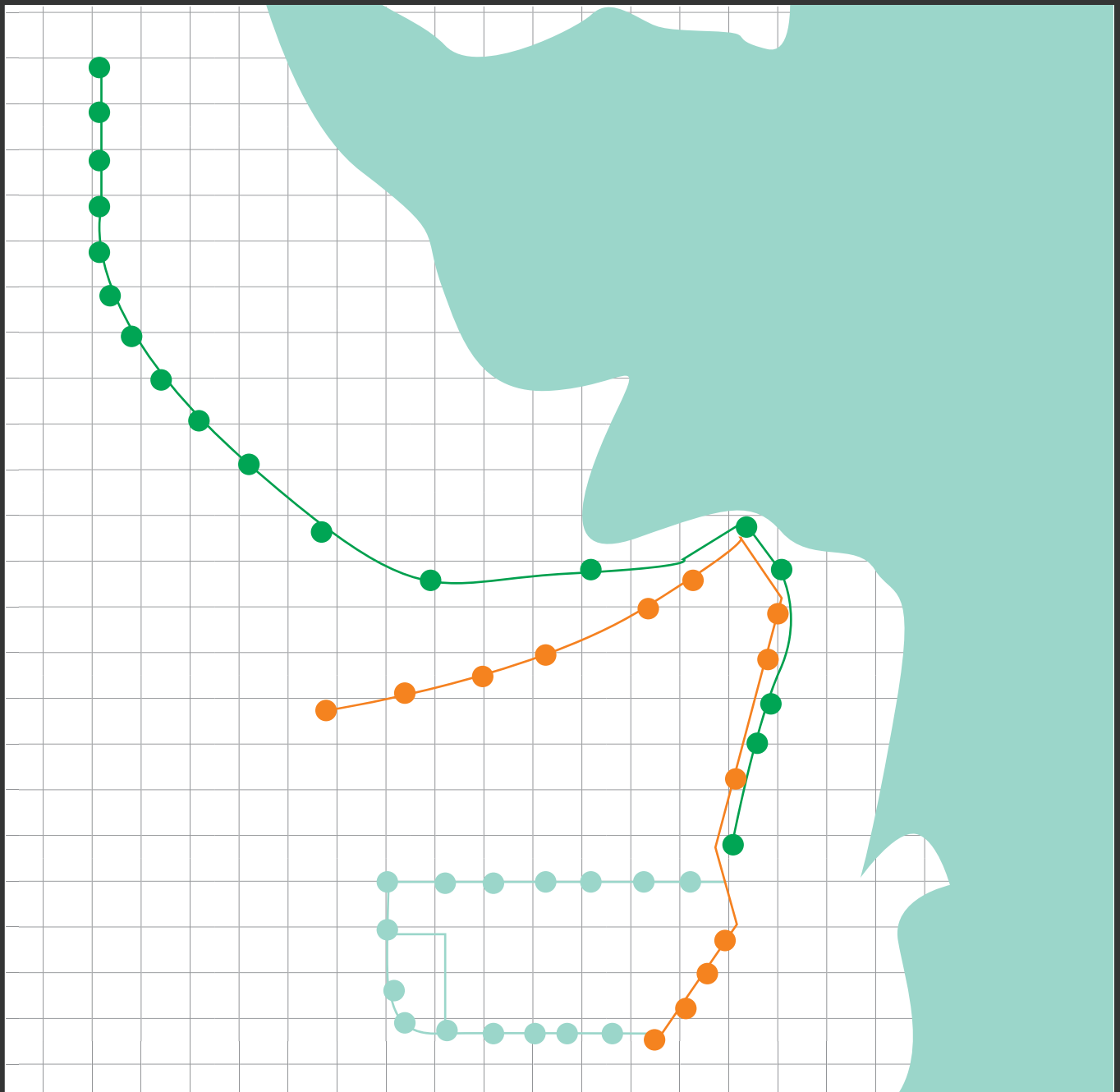
CITY METRO LINE

INFORMAL URBAN



GONDOLA LINE





CONTENTION

RESTITCHING THE URBAN FABRIC

THE IMPLEMENTATION OF GONDOLAS ALL AROUND LATIN AMERICA HAVE INDEED ASSISTED IN BRINGING MORE TRANSPORTATION OPPORTUNITIES TO THE INFORMAL AREAS OF THE URBAN SETTLEMENTS, BUT HAVE THEY PROPERLY SUCCEEDED ?

THE GONDOLA SYSTEM IS A MASTER AT TAKING YOU FROM POINT A TO POINT Z, BUT WHAT ABOUT EVERYTHING IN BETWEEN, WHICH IN MOST CASES IS FULL OF THE URBAN INFORMAL. THE NEXT PROGRESSIVE STEP IN THIS GONDOLA TIMELINE WOULD BE TO ENGAGE THIS RIBBON SPACE FROM POINT A TO POINT B OUT HORIZONTALLY INTO THE SLUM AREAS, AND STITCH BACK UP THE GAPS THE GONDOLAS HAVE CREATED.



integration

noun

/in-ti-grey-shuhn/

: an act or instance of combining into an integral whole

: an act or instance of integrating a racial, religious, ethnic group, organization, place of business, school, etc.

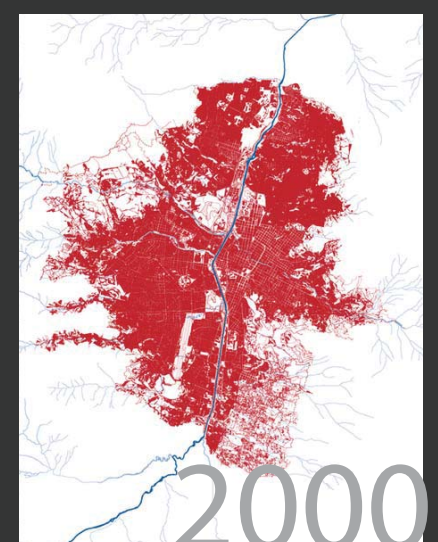
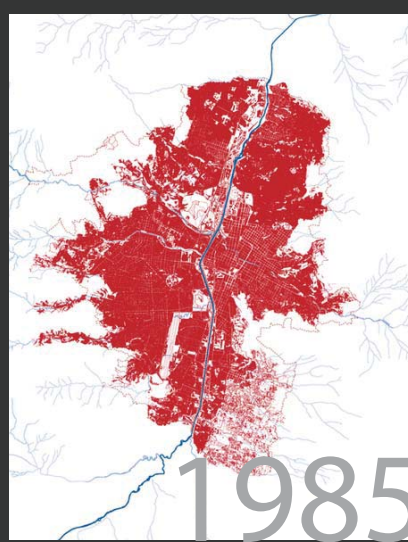
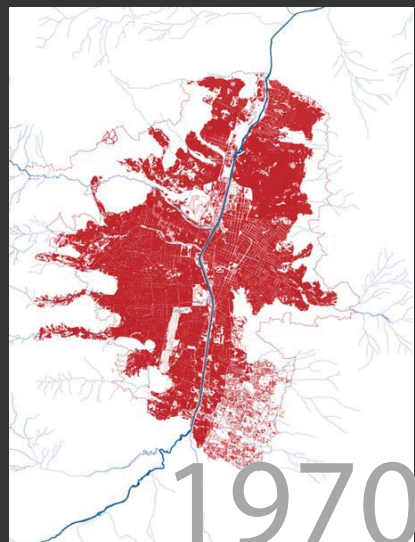
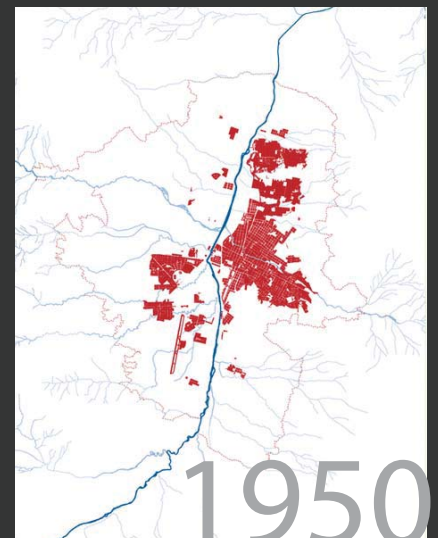
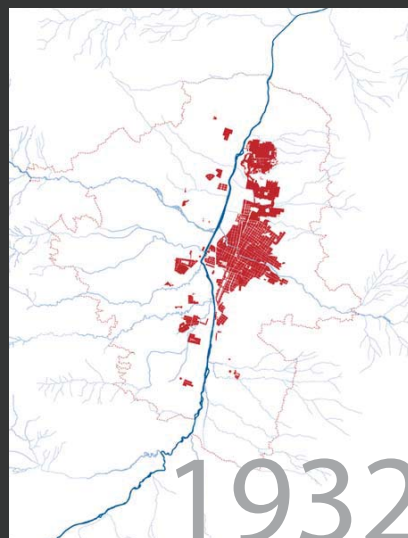
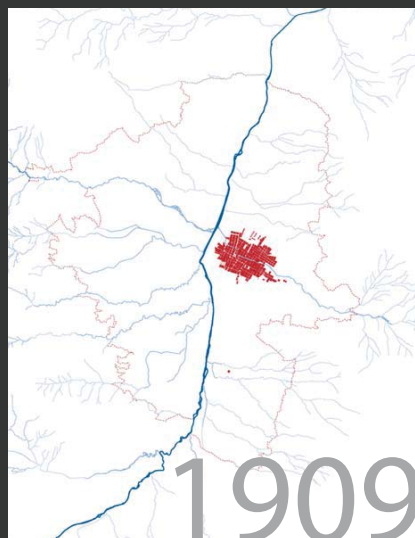
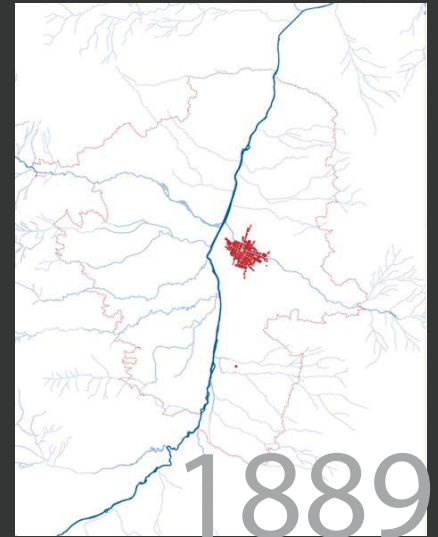
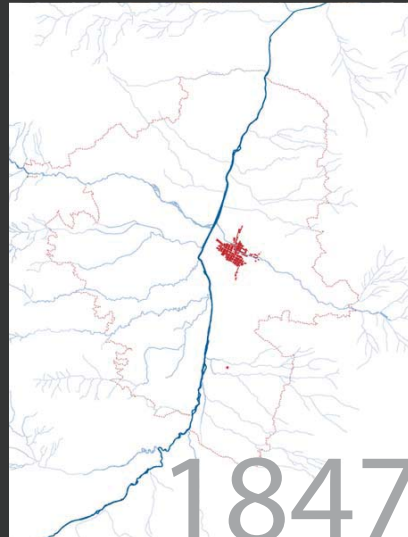
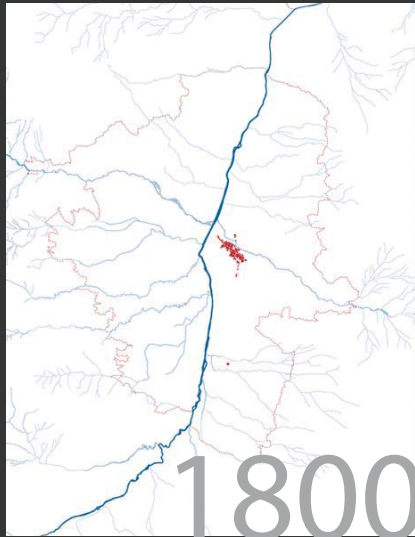
: behavior, that is in harmony with the environment.

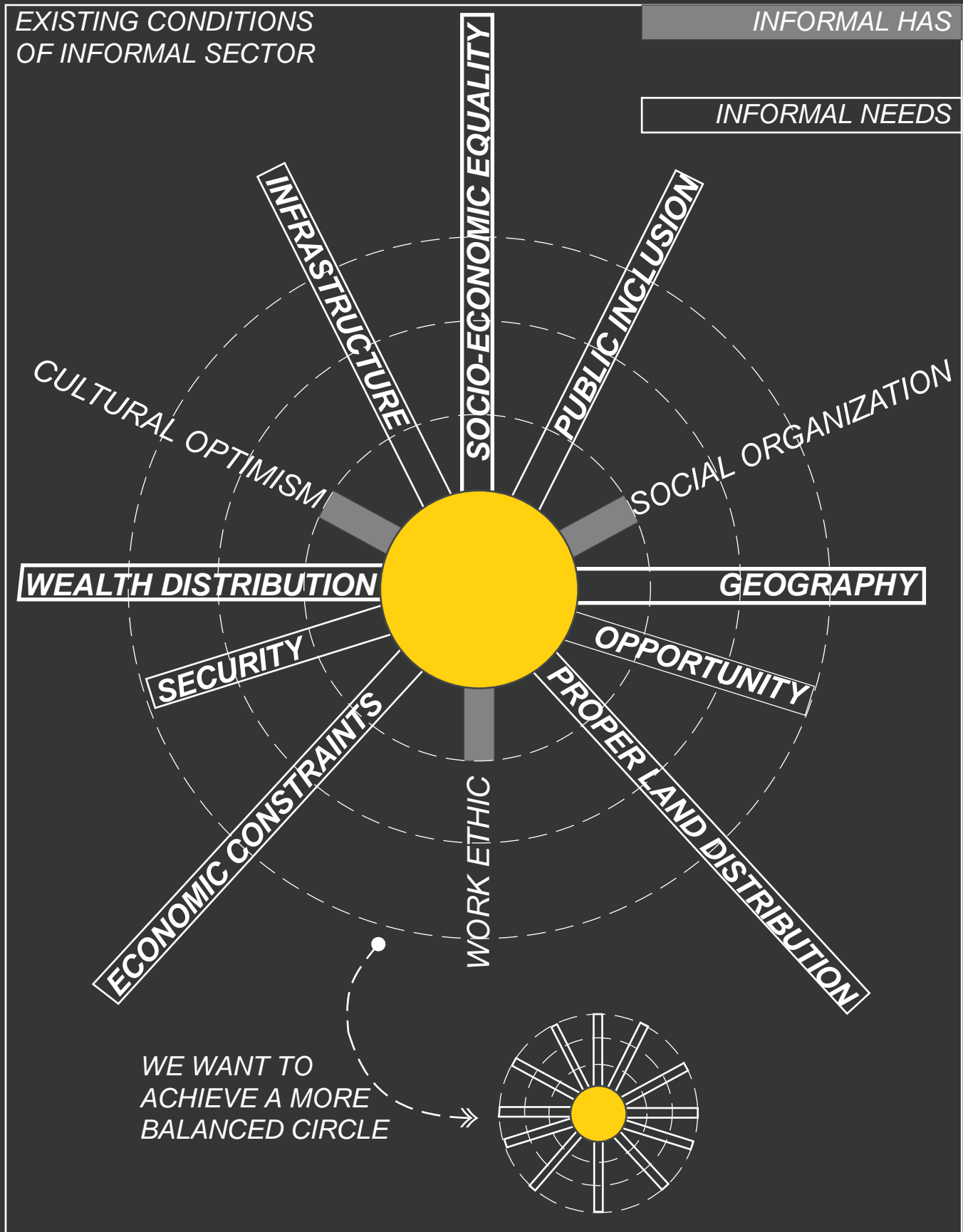
MEDELLIN

THE GROWTH OF MEDELLIN REALLY TOOK OFF AT THE BEGINNING OF THE 20TH CENTURY WITH THE IMPLEMENTATION OF THE RAILROAD SYSTEM. THIS NEW FORM OF TRANSPORTATION ALLOWED THE COFFEE INDUSTRY IN MEDELLIN TO ENTER INTO THE WORLD'S ECONOMY GAME, BRINGING MORE MONEY TO THE LOCALS. AROUND THE 30'S CAME A WAVE OF INDUSTRIALIZATION WITH THE ADDITION OF MULTIPLE TEXTILE FACTORIES. THE LINEAR RIVER HAS REMAINED THE CORE SPINE FOR WHICH GROWTH TO EXPAND OFF OF. BY THE 1980'S THE INDUSTRIAL GROWTH BEGAN TO SLOW DOWN WITH THE HEIGHT OF THE DRUG CARTEL. WITH THIS CAME A RISE IN CRIME, VIOLENCE AND DARKNESS THAT CONSUMED MOST OF MEDELLIN.

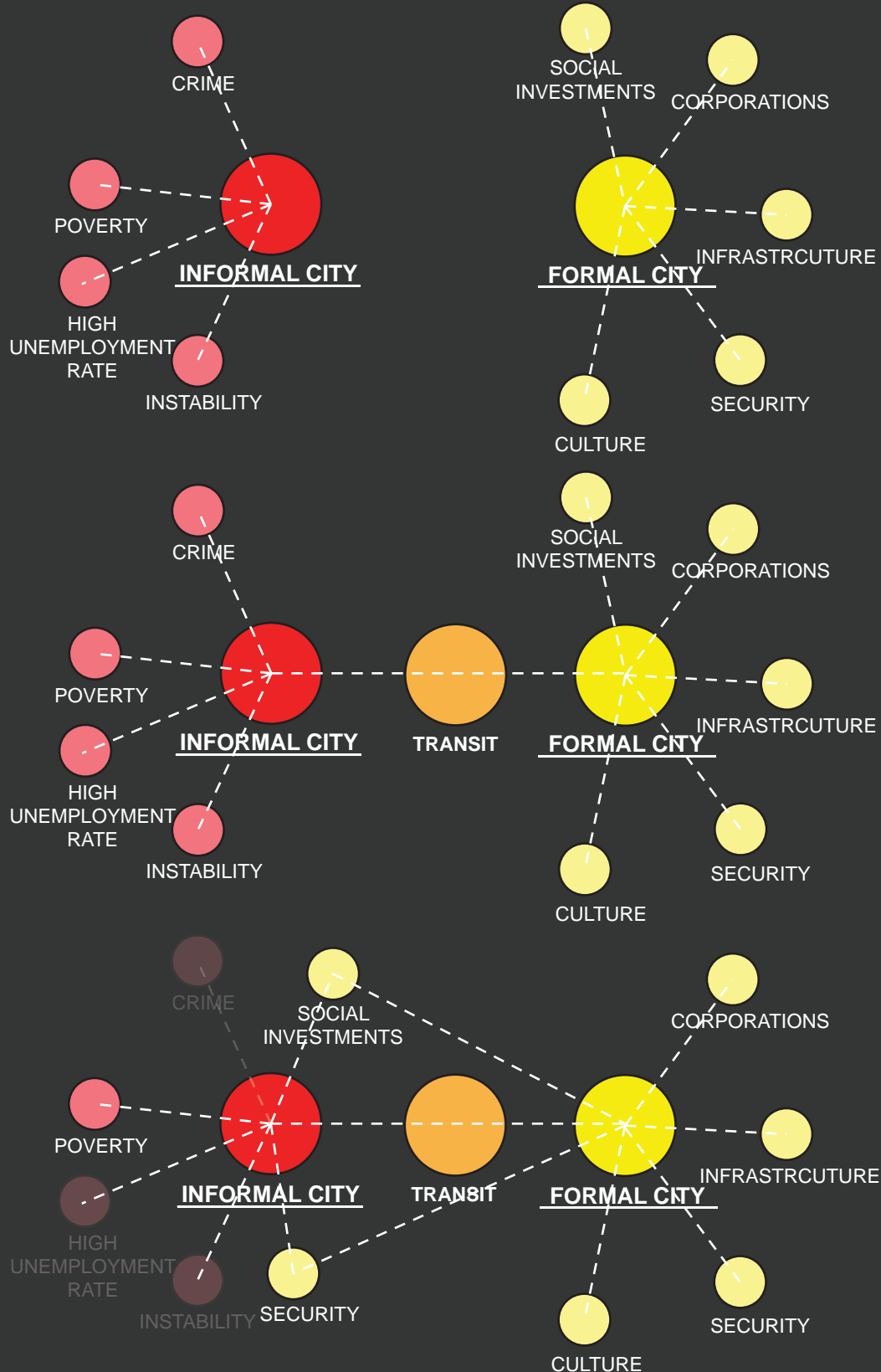
TODAY MEDELLIN HAS RISEN FROM THAT DARKNESS AND IS BECOMING LESS VIOLENT WITH AN EXTREME DROP IN CRIME RATE. THE CULTURAL OPTIMISM HAS RISEN AND A NEW SENSE OF COMMUNITY HAS BEGUN TO FORM WITH THE IMPLEMENTATION OF PUBLIC SPACES, HOUSING OPPORTUNITIES AND A GONDOLA TRANSIT SYSTEM.

COLOMBIA





BASED ON THE READING : URBAN INFORMALITY AS A 'NEW WAY OF LIFE'
NEZAR ALSAYYAD



BASED ON THE READING : ARTICULATING THE BROKEN CITY
 JORGE MARIO JAUREGUI

PHYSICAL LAND BOUNDARIES



GO VERTICAL !



MEDELLIN



2nd largest
city in Colombia

2.9
million

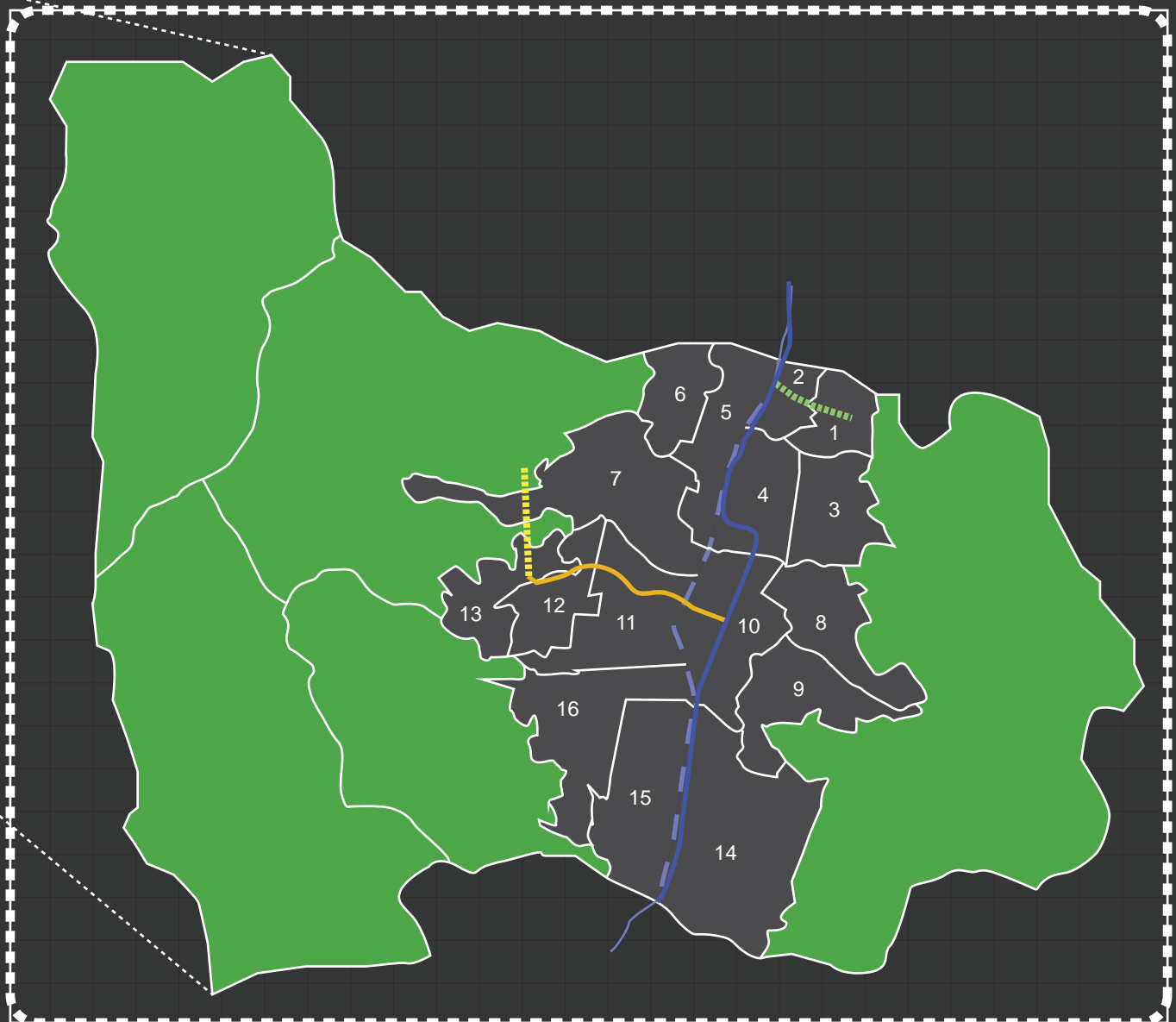
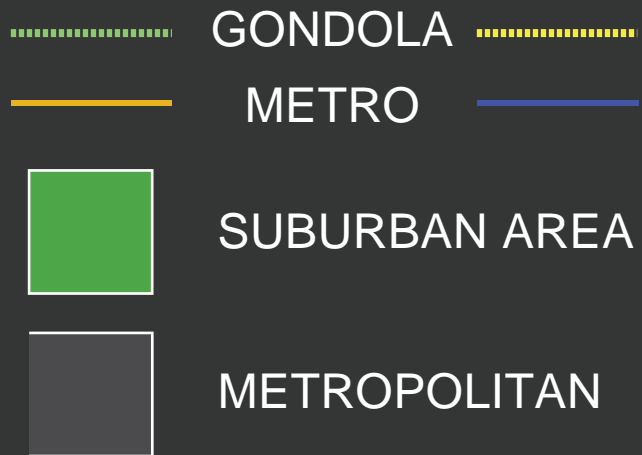
92nd most
populous metropolitan
area in the world

IN RELATION TO
SYRACUSE

5
times larger in sq. miles

16.5x
more people

COLOMBIA

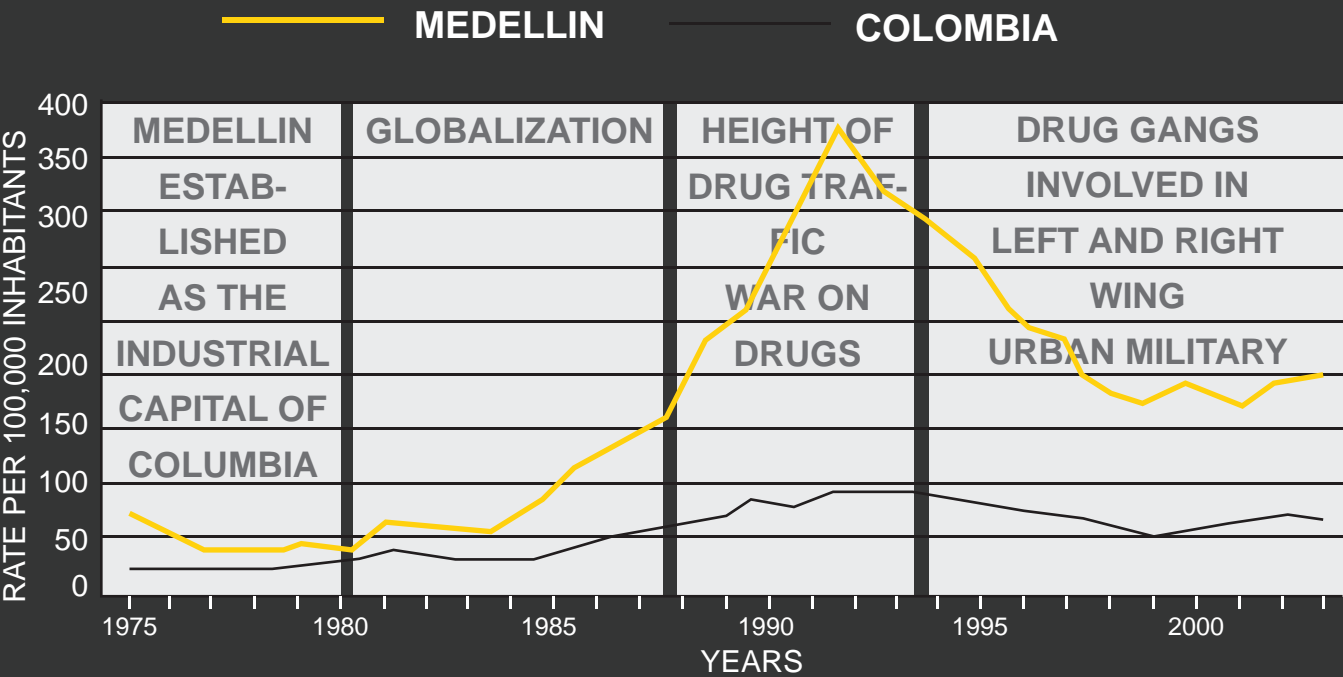


HOMOCIDE RATE - 16 COMUNAS

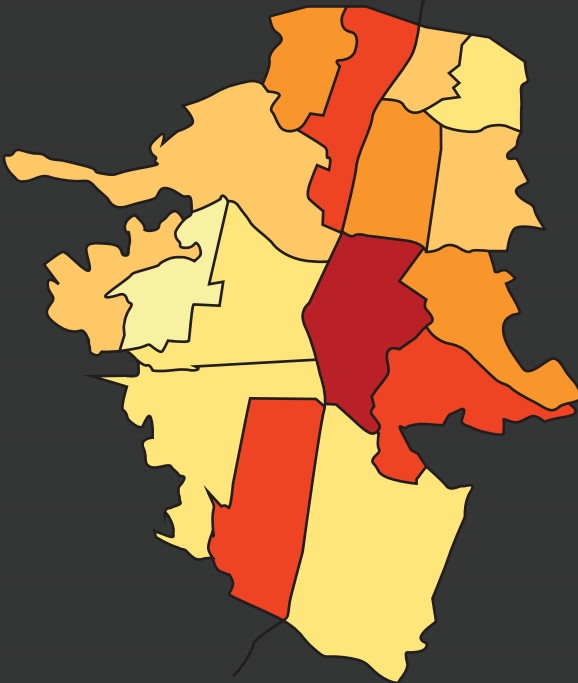
OVER THE PAST 20 YEARS THE HOMOCIDE RATE OVER THE 16 COMUNAS OF MEDELLIN HAS SPREAD IN A RADIAL WAY. INITIALLY MOST OF THE CRIME WAS CONTAINED TO A DISTANCE FROM THE MAIN RIVER. THEY HAVE EVEN TURNED SOME OF THE FROM NORTH TO SOUTH. MORE RE-OUTS. ALTHOUGH THE CENTLY WE HAVE SEEN THE CRIME SPREAD TO MORE OF THE PERIPHERY WHERE DUE TO THE TERRAIN, THE 1990.



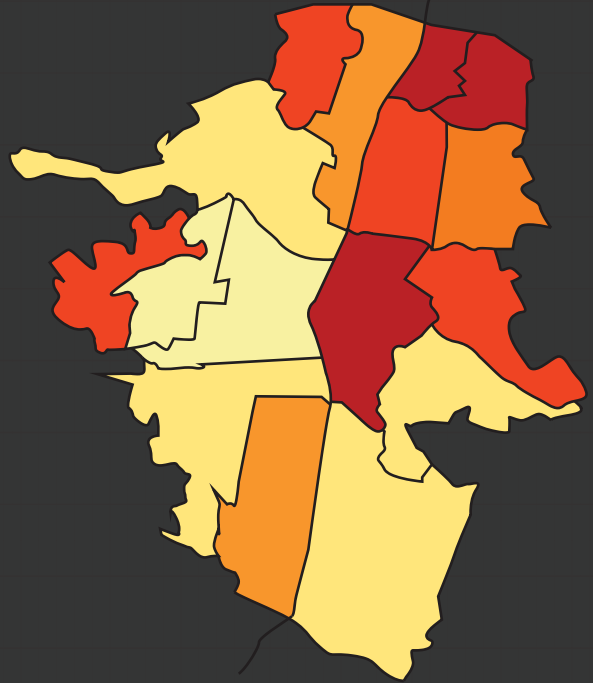
SECURITY AT THE GONDOLAS STATIONS



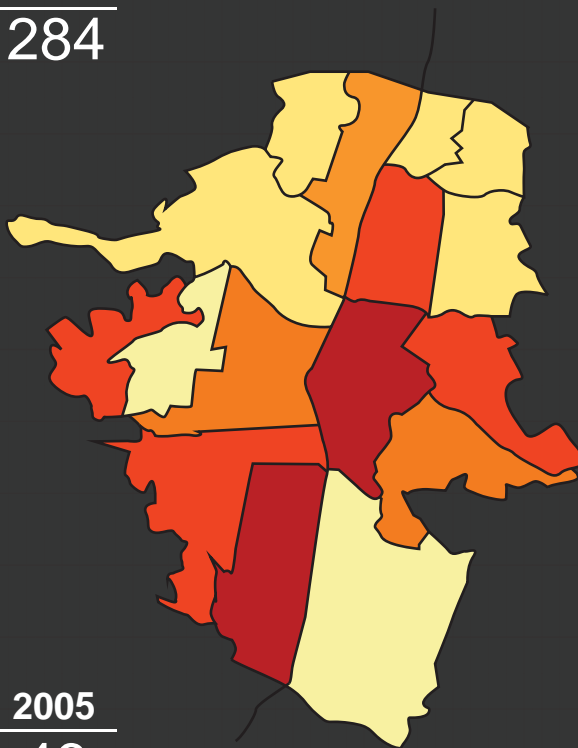
HOMOCIDE RATES



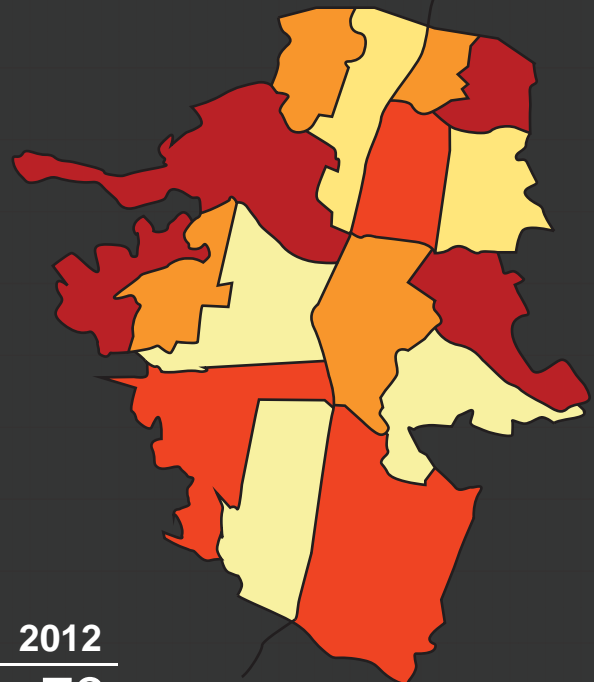
1995
284



2000
186



2005
46



2012
79

MEDELLIN

TOPOGRAPHY

